

15(6)
AUTHOR:

Gol'bin Ya. A.

SCV/76-59-2-1/2*

TITLE:

Glass Industry in Soviet Belorussia (Stekol'naya
promyshlennost' Sovetskoy Belorussii)

PERIODICAL:

Steklo i keramika, 1959, Nr. 2, pp. 1-3 (USSR)

ABSTRACT:

In the present paper the author describes the primitive working methods and the small production volume of Belorussia's glass industry in the time before World War I. This and World War II brought an almost complete destruction of this industry. In the years from 1946 to 1950 Belorussia's glass works were equipped with modern furnaces and machines that increased their production considerably. The construction of two large glass-works began in 1954. The glass works "OKtyabr'" were modernized. The plant in Nove-Borisov (imeni Dzerzhinskogo) introduced the automatic machine VS-2a for the production of thin-walled drinking glasses thus achieving a considerable increase in production. In the years from 1959 to 1961 the Republic's glass works are to be extensively mechanized and automatized, and the assembly line procedure is to be introduced for the production of tableware. Also the variety of glass products is to be enriched from glass tubes. Glass

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Glass Industry in Soviet Poland

27/12/1987 10:10

factory. The Somel factory is continuing the production of polished glass reinforced tubes for wall insulation and glass tubes. The Belarussian glass industry's output production is to be doubled by 1985 as compared to 1987.

Card 2/2

GOL'BIN, Yakov Abramovich. Prinimali uchastsiye: PASHKEVICH, O.N., kand. ekonom.nauk; REMEZKOVA, A.Z., nauchnyy sotrudnik. VEDUTA, N.I., kand.ekonom.nauk, red.; INTYAKOV, N.G., kand.tehn.nauk, red.; STRIZHONOK, M., red.izd-va; VOLOKHANOVICH, I., tekhn.red.

[Economic aspects of founding] Voprosy ekonomiki liteinogo proizvodstva. Minsk, Izd-vo Akad.nauk BSSR, 1960. 261 p.

(MIRA 13:10)

(Founding)

VEDUTA, Nikolay Ivanovich; GOL'BIN, Ya.A., kand.ekonom.nauk, red.;
STRIZHONOK, M., red.izd-va; VOLOKHANOVICH, I., tekhn.red.

[Economic efficiency of capital investments in industry]
Ob ekonomicheskoi effektivnosti kapital'nykh vlozhenii
v promyshlennosti. Minsk, izd-vo Akad.nauk BSSR, 1960.
345 p.

(MIRA 14:3)

(Capital investments)

SITNIKOV, Oleg Stepanovich. Prinimal uchastiye MOISEYENKO, I.G., inzh.;
GOL'BIN, Ya.A., kand. ekonom. nauk, red.; STRELZHONOK, N., red.izd-va;
SIDERKO, N., tekhn. red.

[Economic efficiency of the mechanization and automation of auxiliary operations in the machinery industry] Ekonomicheskaiia effektivnost' mekhanizatsii i avtomatizatsii vspomogatel'nykh protsessov v mashinostroenii. Minsk, Izd-vo Akad.nauk BSSR, 1961. 146 p. (MIRA 14:11)
(Machinery industry) (Automation)

GOLBIN, Yakov Abramovich; INTYAKOV, N.G., kand. tekhn. nauk, red.;

[Economics efficiency of precision casting in machinery manufacturing] Ekonomicheskaja effektivnost' tochnogo lit'ja v mashinostroenii. Minsk, Nauka i tekhnika, 1964. 160 p.
(MRA 17:11)

GOL'BIK, Yu. A., Kand. ekonom. nauk; KUDRYAVTSEV, M. I., Inzh., r. n.; T., A. L.,
Inzh.

Improving the technology of precision cutting. Gt. project, no. 17
37-38. D. '68. Gt. 12

STRUCTURE AND PROPERTIES INDEX

24

CA

Explosive properties of mixtures of inert salts with nitroglycerin. A. I. Goldhinder. *Doklady Akad. Nauk S.S.R.* **50**, 100-200 (1943). - Mixts. of 15% nitroglycerin with 85% of the salt sifted through 20 mesh (sq. cm.) packed in paper tubes of 30-32 mm. diam., were detonated and the max. distance over which the detonation could be transmitted to an identical charge, placed on dry sand, was detd. This distance was 25 cm. for NH₄Cl, 11 for NaCl, 10 for NaHCO₃; (NH₄)SO₄, (NH₄)CO₃, talcum, and chalk do not transmit the detonation even in end-to-end contact. In the case of NaCl, the effect of the particle size is illustrated by the data: av. length of crystals 0.06, 0.09, 0.10-0.12, 0.16, 0.34 mm., max. distance 0, 6, 12, 9, 5 cm.; there is, consequently, an optimum grain size irrespective of the crystal size, mixts. with 85% NaCl never exceed 12 cm. as max. distance of transmission of detonation, whereas NH₄Cl attains 25 cm. Ability to transmit detonation at a distance seems to be linked with the ability of the salt to exude the nitroglycerin in the form of drops; however, addn. of 10% of talcum or chalk, which absorb the liquid, does not impair the detonation-propagating ability. Slight gelatinization of the nitroglycerin will also prevent exudation but, at the same time, it decreases somewhat the max. distance. N. Thon

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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GOL'BINDER, A. I.

USSR/Mining
Charges, Explosive
Explosives

11 Jan 1948

"Function of Inert Salts in the Composition of Safety Explosives," A. I. Gol'binder, Moscow Sci Res Inst Safety in Mining Operations, 2½ pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LIX, No 2

Results of experiments show that hypotheses relating the role of inert salts in composition of safety explosives only to the absorption of heat erroneous, and that in processes of ignition the chemical nature of the inert salts also shows influence. Makes some remarks on character of influence. Submitted by Academician N. N. Semenov, 6 Nov 1947.
[redacted]

43TB9

Gor'kin Georgiyevich, doktor khimicheskikh nauk, professor; BAGALA, L.I.,
professor, retsenzent; DANILOVA, S.N., professor, retsenzent;
PEREVERZEEVA, A.Ye., professor, retsenzent; GOL'BINDER, A.I., kandidat
tekhnicheskikh nauk, redaktor; BOGOMOLOVA, N.F., izdatel'skiy redaktor;
ROZHIN, V.P., tekhnicheskiy redaktor.

[Gunpowder and explosives] Porokha i vzryvchatye zemchestva. Izd.
2-oe, perer. Moskva, Gos.izd-vo obor.promyshl., 1957. 186 p.

(Explosives, Military) (Gunpowder) (MIRA 10:11)

GOL'BINDER, A.I.

Using large charges in oil-well shooting. Dokl.AN Arm.SSR 24 no.2:31-
33 '57. (MIRA 10:4)

1. Nauchno-issledovatel'skiy institut geofizicheskikh metodov raz-
vedki.

(Oil wells—Equipment and supplies)

Author: W. A. Yeager Title: Small Business

FIGURE: *Geographic Distribution of Members of Entomophaga (Omnivora) in the*

For more information about the program, call 1-800-222-1815 or visit www.hrsa.gov.

ABSTRACT: The effect of a transverse magnetic field on the rate of decomposition of ammonium nitrosoformate is studied. The change is explained by the assumption that the magnetic field causes the conversion of the explosive to the explosive-like formic acid derivative, which is more thermally stable. The conversion is measured by the change in absorption at 260 m μ , as measured in the ultraviolet region. The absorption change is measured by the change in absorption at 260 m μ , as measured in the ultraviolet region. The absorption change is measured by the change in absorption at 260 m μ , as measured in the ultraviolet region.

1.1.2. Penetration by Means of Explosives:

3-7/21-92-1.2/27

depth $h = \frac{A}{C} \cdot n^{\frac{1}{m}}$, where n - the number of explosions, A - the coefficient depending on the properties of the explosive and the rock, and the shape of the explosive, C - the weight of the explosive and the weight of the explosive charge and this relationship is expressed as $H = C \cdot h^B$, where $H = \frac{H_0}{h^m}$, m - exponent slightly less than 1, and B - value ranging from $9 \cdot 10^{-3}$ to $14.5 \cdot 10^{-2}$. Application of explosives in an experimental oil well has disclosed that it is possible to penetrate up to 20 meters at the rate of 0.6 meters per hour, while a turbodrill penetrates about 5 meters at the rate of 0.15 meters per hour. There is 1 Figure, and there are 5 references, of which 4 are Soviet, and 1 is English.

Can 2/2 1.1.2. Penetration by Means of Explosives. -- Appendix 1.

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CIA-RDP86-00513R000515610014-8

GOL'BINDER, A.I.; KAGAN, Ye.B.; OSTROVSKIY, A.P.

Sinking wells by blasting. Neft. khoz. № 7:13-16 J1 '58.

(Oil well drilling)

(MIRA 11:12)

BANDURIN, Mikhail Kuz'mich; RUKIN, Lev Grigor'yevich; GORST, A.G.,
prof., doktor khim.nauk, retsenzent; GOL'BLINDER, M.I., kand.
tekhn.nauk, retsenzent; SHEKHTMAN, E.A., izd.red.; ROZHIN,
V.P., tekhn.red.

[Collected problems on explosives] Sbornik zadach po teorii
vzryvchayk veshchestv. Moskva, Gos.izd-vo obor.promyshl.,
1959. 187 p. (MIRA 12:8)
(Explosives)

14(5)

SCV/132-59-6-5/16

AUTHORS: Gol'binder, A.I. and Ostrovskiy, A.I.

TITLE: Experimental Research on the Blast Drilling of Bore-Holes

PERIODICAL: Razvedka i okhrana nedor, 1959, Nr 6, pp 27 - 33
(USSR)

ABSTRACT: The authors describe experimental research on blast drilling of bore-holes drilled in concrete and granite models, to establish certain rules of the efficient blast drilling in deep bore-holes. In the experimental blast drilling of a prospecting bore-hole for Devonian deposits of oil (Kuybyshevskaya Oblast') in very hard silicified limestones at a depth of over 2500 m, a speed of 0.6 m/hour was achieved. Normal drilling, with a milling cutter, gives only 0.15 m/hour. First, a series of experiments was made to establish the influence of the height of a water column in the bore-hole on the effectiveness of the explosion. It was found (Table 1) that the average

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Experimental Research on the Blast Drilling of Bore-Holes

deepening of the bore-hole with one explosion reaches its maximum in dry bore-holes, and the volume of destruction increases when the bore-hole is filled with water, the height of the water column being equal 5 - 10 diameters of the bore-hole. A further increase in the height does not increase the volume of destruction. The next series of experiments was made with a constant 6 m height of the water column, but with a variable weight of explosive charges. The results can be expressed in the following equations:

1) $\Delta h = K_1(G - g)^{1/3}$;

2) $h = K_2 G^{1/5} + h_p$ (so-called Taitian equation and

Card 2/4 3) $\frac{\pi d^2}{4} \Delta h = \Delta V_{sr} = K_3 G$,

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Experimental Research on the Blast Drilling of Bore-Holes

where Δh - average deepening with 1 explosion in mm,
G - the explosive charge weight in gr, a - the constant;
 h_2 - the distance between the lower part of the charge
and its gravity center in mm; d - the diameter of the
bore-hole; ΔV_{sr} - average volume of the concrete
crumbled by 1 explosion in milliliters (Table 2).
These results show that for the small charges, the
correlation between the deepening of the bore-hole
and the weight of the blasting charge are positively
reflected in equations 1 and 3. Equation 1 can be
reduced to $\Delta h = K_1 G^{1/3}$. A further series of experi-

ments showed (Table 3) that explosive charges of elongated form give better results than other forms of charges. Another series of experiments was conducted in quarries of different rocks: granite rocks of the Sokolovskiy quarry in the Zhitomirskaya Oblast'; lime-stones - in the Testovo and Iodol'sk' quarries, Moskovskaya Oblast' and of the clay pits of brick making

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Experimental Research on the Blast Drilling of Bore-Holes

plants of the Moscow region (Table 6). The after-explosion deformation is of three typical types: granites crumble; clays become more compressed; limestones occupy a middle position between the two. In the sub-aqueous explosions, a large part of the rocks is detached from the walls of the bore hole by the action of the produced waves. The comparison (Table 7) of the explosion in a "dry" bore-hole, shows that the volume of destruction in the first bore-hole is 10 times larger than in the dry one. There are 7 tables, 1 photograph, 2 diagrams and 5 Soviet references.

ASSOCIATION: VNIIburovoy tekhniki (The VNII of Drilling Technology)
Card 4/4

ANDREYEV, Konstantin Konstantinovich; BELYAYEV, Aleksandr Fedorovich;
SNITKO, K.K., prof., doktor tekhn.nauk, retsenzent; AVANESSOV,
D.S., dotsent, kand.khim.nauk, retsenzent; GOL'BINDER, A.I.,
doktor tekhn.nauk, red.; LOSEVA, G.F., izdat.red.; GARNUKHINA,
L.A., tekhn.red.

[Theory of explosives] Teoriia vzryvchayemykh veshchestv. Moskva,
Gos.nauchno-tekn.izd-vo Oberengiz, 1960. 595 p.

(Explosives)

(MIRA 14:1)

11.2121
11.7200

26547
S/076/61/C35/005/011/016
B110/B101

AUTHORS: Gol'biner, A. I., and Goryachev, V. V. (Moscow)

TITLE: Pulsating combustion of liquid explosives thickened with polymer solutions

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 8, 1961, 1808 - 1812

TEXT: The authors have considered the modification of the burning character of explosives when thickened by means of solutions of high-molecular compounds. Liquid methyl nitrate (MN) uniformly burns at room temperature and at atmospheric pressure at a rate of ~ 0.12 cm/sec in glass tubes (diameter 3.8 - 5.3 mm). The combustion pulsates at a viscosity rise obtained by dissolving some polymethyl methacrylate (PMMA). Periods of steady propagation alternate with flame splashing accompanied by whistling sounds; frequency and intensity of pulsation grow with the polymer content. This causes an increase of the average rate of combustion. A moving picture (32 - 100 frames/sec) showed the whole period to consist of a series of equal cycles. The surface first drops slowly, but remains smooth in the process; the rate of combustion is lower than

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Pulsating combustion of...

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that of normal MN (0.08 cm/sec at 0.1% polymer content; 0.05 cm/sec at 0.25%, average rate 0.13 and 0.18 cm/sec). Vapor bubbles are then formed under the surface along with a growing foam layer, a sudden ejection of the surface layer into the flame zone, where a quick combustion takes place as a combustion of suspended individual drops. After combustion of this suspension (a flashing in case of a large polymer content) the cycle is repeated. Poorly thickened MN products pulsate with relatively constant frequency and amplitude. With a 0.25% polymer solution the average rate (cm/sec) grows linearly with pressure (kg/cm²) between 1 - 1.7 kg/cm² (first combustion type): $w = -0.049 + 0.168p$ (1). With $p > 2.6$ kg/cm² in $w = f(p)$ (2), (1) is overlapped by a pulsation of another kind (second combustion type). This causes an abrupt rise of the mean combustion rate. With pure MN the 2nd type begins at ~ 1.7 kg/cm². In addition, the 1st type is suppressed with a rise of the initial pressure. A rise of viscosity raises the minimum pressure at which the second type begins. Thus, an MN solution containing 3% of the polymer burns nonuniformly at 1 - 3 kg/cm² (1st type), while burning uniformly without pulsating at 3 to 9 - 10 kg/cm², and with pulsation at > 10 kg/cm² (2nd type). Ethyl nitrate (EN) is 16 times slower in burning (~ 0.07 cm/sec in a 1-mm

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Pulsating combustion of...

glass tube). Small vapor bubbles rarely break through the smooth surface. With 0.05% PMMA it undergoes a pulsating combustion with a weak amplitude. The surface of the boiling liquid is not smooth, and bubbles distort it continuously as they break through. The rate of combustion drops as a function of the degree of burning out. In case of a polymer content over 0.5%, combustion becomes more uniform, while its mean rate drops. At a polymer content \gg 2%, combustion is interrupted. Similar conditions prevail in the binary explosive, 60 wt% diglycol dinitrate in tetrannitromethane, at a combustion rate of 0.09 cm/sec. In case of a 0.25 - 0.5% PMMA content a pulsating combustion takes place, until the mean rate is lower. With a rise of the PMMA content pulsation turns weaker, and stops altogether at \sim 1.5%. Then, a uniform combustion with gradually decreasing rate takes place. Methyl methacrylate monomer effects a rise of the rate, but no pulsation. K. K. Andreyev et al. (Ref. 2: Termicheskoye razlicheniye i goreniiye vzyvchmykh vosknyastv. Gosenergoizdat, M.-L. 1957, str. 130) showed that thickened liquid nitro-ester (nitrocellulose) stabilizes combustion, and that gelatinized explosives burn uniformly, just like binary mixtures of nitro agar with liquid fuels, that have been gelatinized by means of PMMA. The pulsation

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Pulsating combustion of...

described here is, however, brought about by evaporation of the liquid explosive in the heated layer of the condensed phase. PZMA is less volatile, and, under the conditions of combustion, is not capable of gas formation. Fractional evaporation and impoverishment of the heated zone at the explosive take place. It becomes more viscous, forms a film, and prevents the vapor from escaping. The higher viscosity renders the diffusion balancing with the residual liquid more difficult. The rate drops as the layer thickness grows. If the vapor pressure of the foam bubbles becomes high enough, vapor is expelled along with liquid particles dragged along, and the cycle is repeated. On a rise of pressure the 1st type is probably suppressed by 1) drop of viscosity; 2) drop of amplitude and rise of frequency due to an increase of burning rate; 3) decrease of layer thickness. On a rise of pressure, a surface disturbance causing a pulsation may arise according to L. I. Landau's mechanism (Zh. eksperim. i teor. fiz., 14, 240, 1944). The lower pressure limit of the transition to the 2nd type rises with viscosity. At a relatively high burning rate (MN), the 1st type prevails. In case of a very slow combustion, a change of the composition of a thick layer may gradually take place with an amplitude drop due to convection, diffusion, etc.

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Pulsating combustion of...

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B110/B1C1

gravitational flows. Thus, a gradual polymer concentration of a growing layer and a dropping burning rate are observed in EN until extinction due to heat losses in a tube with small diameter. The uniformity of combustion of nitroesters thickened by means of polymers is probably disturbed. There are 1 figure, 2 tables, and 5 references; 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Ref. 3: A. J. Wittaker et al., J. Phys. Chem., 62, 908, 1958.

ASSOCIATION: Khimiko-tehnologicheskiy institut im. D. I. Mendelejeva
(Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: December 29, 1959

Card 5/5

11.2122 11.8300

11.1370

AUTHORS: Gol'tsman, A. M., and Lesh, L. M.

TITLE: Some peculiarities of the initiation of detonation in low-intensity shock

PERIODICAL: Akademiya Nauk SSSR. Doklady Matematiki, 1982, 259-261

TEXT: I. F. Blinov: An example of the present method of observation that aromatic dinitro compounds of low density (below 1.1 g/cm³) and the specific gravity) is not detonative, while in some cases have been investigated more closely. Experiments were made with nitroxylin (NO₂C₆H₄NH₂) in ethyl

10-10.5 and 21-30 mm in diameter. Lead azide, ~ 0.3 g/cm 3 , in glass tubes of different diameter, was used as initiator. By changing this diameter, the range of initial pulse, defined as explosion center, was varied. Further experiments were made with tetryl and with a mixture of 4% nitroglycerin and 96% ammonium nitrate (NA mixture). In all experiments, a minimum density was found at liquid nitrogen temp., tetryl ~ 0.30 -0.35 g/cm 3 , NA ~ 0.3 g/cm 3 , at which the initiation with lead azide

Some peculiarities of the initiation of
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1001/0014

(4 mm diameter, in water) with a longitudinal initiation. This is attributed to the fact that in the case of a transverse initiation, the explosive is not quickly heated from the point of initiation; the ignition does not occur any more. In narrow tubes, the propagation of the shock wave, owing to reflection from the tube walls, leads to transverse detonation. Ya. I. Leytman, Yu. S. Krasik, and A. F. Pelyukov are mentioned. Ya. S. Zel'dovich is thanked for his work. There are 7 tables and 3 Soviet references.

ASSOCIATION: Moscow Institute of Technology, Institute of D. I. Menzelov, Moscow Institute of Chemical Technology (merging D. I. Menzelov)

PRESENTED: August 1, 1971 by Ya. S. Krasik, Yu. S. Zel'dovich

SUBMITTED: July 24, 1981

Card 2/2

L 17943-63.

EPR/EPP(c)/EWT(m)/BDS APPTC/RPL Ps-4/Pt-4 EM/WW/JW/JWD/H

ACCESSION NR: AT3006095

S/2938/63/000/000/0468/0474

70

AUTHOR: Gol' binder, A. I.

69

TITLE: 31. Combustion of self-igniting explosive mixture and its transition into detonation

SOURCE: Teoriya vzryvchayushchikh veshchestv, sbornik statey, 1963,
468-474

TOPIC TAGS: explosive , detonation, self-igniting explosive , tetra-nitromethane

ABSTRACT: The conditions necessary for the detonation of tetranitro-methane-amine mixtures were studied. Numerous runs with tetranitro-methane 80.5-aniline 19.5 wt.% indicated the height of the liquid column and not its volume to be the critical condition of the transition from combustion to detonation of the self-igniting explosive mixture. There was no regularity to the time between ignition and detonation - sometimes detonation was practically instantaneous, at other times there was a several second lag. Sensitivity was increased

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ACCESSION NR: AT3006095

with pressure increase, burning time was shortened and transition to detonation was facilitated. Mixtures of tetrinitromethane and triethylamine were studied; with o-toluidene critical conditions were quite similar to aniline. With 11.5-37wt.% xylenes there was only combustion when liquid column height was less than 3 cm; with higher columns there was regular transition to detonation. Orig. art. has: 2 tables.

ASSOCIATION: None

SUBMITTED: 00	DATE ACQ: 14Jun63	ENCL: 00
SUB CODE: AR	NO REF Sov: 007	OTHER: 001

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L 17944-63.

EPR/EWP(j)/EPP(c)/EWT(m)/BDS AFFTC/ASD/IPL Ps-4/Pc-4/Pr-1

FM/WW/JW/JWD/R

ACCESSION NR: AT3006094

S/2938/63/000/000/0457/0468

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80

AUTHOR: Gol'binder, A. I.

TITLE: Some rules of combustion of volatile multicomponent explosives

SOURCE: Teoriya vzryvchayushch veshchestv, sbornik statey, 1963,
457-468

TOPIC TAGS: explosive, multicomponent explosive, nitric acid, nitrobenzene, nitrogen tetroxide, polymethylmethacrylate, ethyl nitrate, methyl nitrate, tetranitromethane

ABSTRACT: A study was made of the combustibility, rates and character of combustion of explosive mixtures containing tetranitromethane and benzene, ethyl nitrate, octanol, nitrobenzene, diglycoldinitrate, nitrotoluene or dinitrotoluene; nitrobenzene and nitric acid or nitrogen tetroxide; polymethylmethacrylate and ethyl nitrate or methyl nitrate. In mixtures containing components with different vapor pressures, the vapor has a different composition from the

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original liquid. Fractional combustion will change the vapor composition leading to periodic change in the character of the combustion in pulsations of different frequency and amplitude. The extensive study of combustion rates of tetranitromethane-ethyl nitrate mixtures is graphically presented. A ternary diagram shows the combustibility of the dichlorethane-nitric acid-water (and water-sulfuric acid) system. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 14Jun63 ENCL: 00
SUB CODE: AR NO REF Sov: 006 OTHER: 003

Card 2/2

GOL'BINDE, A.I., SVERDLOV, V.P.; PISHEVICH, V.F.

Some reasons for detonation damping in boreholes. Vzryv. delo
no.52/9:185-163. (MFA 17:12)

1. Moskovskiy ordena Lenina khimiko-tehnologicheskiy institut
imeni D.I. Mendeleyeva.

L 17940-63

EPR/EPP(c)/EWT(1)/EWT(m)/BDS AFFTC/RPL Ps-L/Pr-L H/WW/JM

TF/JWD/H
ACCESSION NR: AT3006098

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75

71

AUTHOR: Gol'binder, A. I.

TITLE: Self-ignition liquid explosive mixtures

SOURCE: Teoriya vzryvovchatykh veshchestv, sbornik statey, 1963,
499-515

TOPIC TAGS: explosive , self-ignition, liquid explosive mixture,
tetrinitromethane, explosive mechanism , nitric acid.

ABSTRACT: The spontaneous ignition of compact liquid charges (tetrinitromethane with organic amines or other organic fuels; liquid mixtures based on concentrated nitric acid) was studied to work out application problems and to broaden knowledge of explosive mechanisms. Two methods were observed. In one, conversion of the condensed phase to reactive gases proceeds without significant temperature increase. When concentration of gases exceeds a limit, they react and detonate, but vapors of the original material do not play a significant role in the detonation. In the other type of spontan-

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L-17940-63

ACCESSION NR: AT3006098

ous ignition, an exothermic reaction occurs in the condensed phase resulting in chemical and thermal self-acceleration of the reactions. Maximum temperature is limited by boiling point of original explosive material or of its first-stage conversion products. Heat explosion and ignition occur as in previous method, only vapors of the original explosive material take part in the detonation. "Substantial part of the experiments were carried out in the All-Union scientific research institute for drilling by S. A. Lovlya, N. I. Kozlov, G. V. Dimza, to whom the author expresses sincere thanks." Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 14Jun63

ENCL: 00

SUB CODE: AR, CH

NO REF Sov: 012

OTHER: 005

Card 2/2

ACCESSION NR: AP4041158

S/0020/64/156/004/0905/0908

AUTHOR: Gol' binder, A. I.; Ty*shevich, V. F.

TITLE: Channel effect in the detonation of explosives

SOURCE: AN SSSR. Doklady*, v. 156, no. 4, 1965, 905-908

TOPIC TAGS: detonation, explosive, channel effect, shock wave, luminosity, shock wave propagation, trotyl, hexogen, lead nitrate

ABSTRACT: High-speed photography (500,000—1,000,000 frames per sec) and x-rays were used to study the channel effect in the detonation of explosives. The experiments were carried out in organic glass shells using fine ground trotyl and hexogen charges with densities of 0.5 g/cc and fine ground mixtures of trotyl and lead nitrate (10—20%) with densities of 0.6—0.7 g/cc. Analysis of the experimental data and published data showed that in all cases the boundary of the expanding detonation products is sharply delineated and never overtakes the detonation front. The luminosity observed in the channel is not connected with the motion of the detonation products. Special experiments showed that the luminosity depends on the type of gas in the channel. Maximum luminosity

Card 1/2

KOMISIJA P

25(5)

PLACE I BOOK EXPLOITATION 80/1392

Leningrad. Instosherno-ekonomicheskiy institut

Organizatsiya i planirovaniye ravnocennoy raboty mashinostroitel'nykh predpriyatiy;
Metodicheskoye sveschennye. Diskussii (Organization and Planning of Uniform
Work in Machine-building Enterprises; Conference of Values. Report) Moscow, Nauksgiz,
1953. (Editor: I.M. Trudy, vyp.22) 4,000 copies printed.

Eds.: S.A. Volkov, and E.G. Satevonskij Tech. Ed.: L.V. Sokolova; Manager: M.I. Fur
Literature on Machine-building Technology (Machine-building); V.P. Kuznetsov, Engineer.

PURPOSE: This collection of articles is intended for engineering and technical
personnel in machine-building establishments, and for scientific workers and
students of institutes and departments of engineering and economics.

CONTENTS: This collection of articles contains reports by workers from various
scientific research institutes, and industrial establishments presented at the
conference of values on the subject: "Organization and Planning of Uniform
Operations in Machine-building Establishments." These reports discuss several
problems encountered in organization, analysis, and theory of uniform production,
as well as problems in schedule planning, technical preparation, and promotion
specialization.

Card 1/8

Dolzhik, Ya.K., and N.I. Kavel'skiy, and N.V. Pushkarevich, Candidates of Economic
Sciences (Institut ekonomiki Akademii nauk SSSR [Institute of
Economics of the Academy of Sciences of the USSR]). "Nights Operation
as the Most Important Condition for Transition to New Operating Con-
ditions."

332

GOL'DORT, G. V.

Irradiation

New data on the irradiation process. Zhur. vys. nerv. deiat. 1 no. 6, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953^{1/2} Unclassified.

GOL'ERAYKH, I.G.; ZABALUYEV, V.V.; MIRKIN, G.R.; SHAPOSHNIKOV, V.M.

Methods for studying the tectonics of closed areas, Geol.nefti
i gaza 7 no.2:44-49 F '63. (MIRA 16:2)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologora
vedochnyy institut i Stavropol'skiy filial Grozneneskogo nauchno-
issledovatel'skogo neftyanogo instituta.
(Geology, Structural)

GOL'BRAYKH, I.G., ZABALYEV, V.V., MIRKIN, G.R.

Tectonic analyses of mega-joints as prospective methods for studying closed areas. Sov. geol. & nozdrav. 1968 (MIRA 18:7)

1. Vseobuchnye neftegazovye i siededorozhnye geologorazvedochnye izuchenija.

GOL'BRAYKH, K.G., inzhener.

Replacing pickling of chrome pigskin leather by salt treatment.
Leg. prom. 15 no. 11:23-24 N 155. (MLRA 9:2)
(Tanning)

GOL'BRAYKH, K., inzhener; LARSHIN, P.

Leather staining or drum dyeing. Leg.prom.16 no.12:29-30 D '56.
(Dyes and dyeing--Leather) (MLRA 10:2)

GOL'BRAYKH, K.G., inzh.

Ways of improving the quality of chrome pigskin leather.
Kozh.-obuv.prom.2 no.3:20-22 Mr '60. (MIRA 14:5)
(Leather)

GOL'BRAYKH, S. F.

... IN EXPLICITATION

SC. 4072

Pervushin, Sergey Alekseyevich, Solomon Yakovlevich Raskovskiy, Samuil Yakovlevich Gol'braykh, Revakka Davydovna Malinova, and Tat'yana Smirlyevna Bykova.

Ekonomika tsvetnoy metallurgii SSSR (Economic Aspects of Nonferrous Metallurgy of the USSR). Moscow, Metallurgizdat, 1961. 516 p. Errata slip inserted. 5,500 copies printed.

Eds.: S. A. Pervushin and S. Ya. Raskovskiy; Ed. of Publishing House: R. F. Avrutskaya; Tech. Ed.: Ye. B. Vaynshteyn.

PURPOSE: This textbook is for students of the special course "Economics and Organization of the Metal Industry" at Institutes of Higher Education. In addition, it may be useful to workers in scientific research and planning institutes, and also to personnel working in the nonferrous metal industry.

COVERAGE: The book discusses the role of the nonferrous metal industry as one of the most important branches of Soviet national economy, its interrelations with other branches of industry, the basic laws of its development, its patterns of consumption, and the fields of application of various nonferrous metals. Also discussed are the basic tendencies of development of nonferrous metallurgy in capitalistic countries and in peoples' democracies. The book
Card 1/4

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R000515610014-8

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R000515610014-8"

GOL'BRAYKH, V.R.

Organization of oral hygiene measures for workers of the Stalingrad
Tractor Factory. Stomatologija 40 no.1:90-91 Ja.-F '61.

(MIRA 14:5)

1. Iz stomatologicheskogo otdeleniya mediko-sanitarnoy chasti
Stalingradskogo traktornogo zavoda (nachal'nik Ye.M.Kanavskiy).
(STALINGRAD—MOUTH—CARE AND HYGIENE)

5(2)

AUTHORS: Ryabchikov, D. I., Gol'braykh, Ye. K. SOV/74-26-4-5/6
(Moscow)

TITLE: Thorium and Its Compounds (Thorium i ego snyedeneniya)

PERIODICAL: Uspekhi khimii, 1959, Vol 28, Nr 4, pp 408-435 (USSR)

ABSTRACT: In this paper the authors report on the discovery of thorium and characterize the element and its compounds. Until recently thorium was considered as belonging to the IV sub-group of the periodic system but at present it is placed to the actinide. So far there are no definite proofs as to the electron configuration of the thorium atom. In principle, the electron distribution of thorium may be considered as being within the limits of the Radon configuration: $6d^27s^2$ or $5f6d7s^2$ (Refs 14 to 16). Still, it has not been found out so far with which element of the actinide series the first 5f electron appears (Refs 10, 12, 17, 18). This fact and some others at the moment do not prove the presumption that the second series of the transition elements exactly begins with thorium (Refs 3, 19, 20). In spite of the fact that metallic thorium was for the first time obtained as long as 100 years ago

Card 1/4

Thorium and Its Compounds

SOV/74-28-4-5/6

industrial production of the pure metal was not feasible until 1939. In principle, the technology of thorium production consists of several stages - decomposition of monazite and dissolution of thorium, preparation of pure thorium compounds and their reduction up to metal. Thorium is a silver-colored metal gradually becoming darker in air. Metallic thorium is pyrophorous and is therefore kept under a petroleum layer. The specific weight depends on the ThO_2 -content. The highest specific weight of the pure metal ranges within the limits between 11.15 - 11.7 g/cm³. Different values are given for its melting point, probably because of a varying ThO_2 -content. It is most probable that the melting point of the pure metal is in the range between 1650-1800° (Ref 55). For the boiling point values between 3000 and 5200° were found. Its evaporation heat is 145 and 177 large caloric/mol. The heat conductivity is 0.32 watt. cm⁻¹.degree⁻¹ at 100° and 0.35 watt.cm⁻¹.degree⁻¹ at 300°. In heating in air the chip of metallic thorium burns up and

Card 2/4

Thorium and Its Compounds

S07/74-28-4-3/5

forms thorium dioxide ThO_2 . Metallic thorium reacts energetically with hydrogen, nitrogen, halides, sulphur, silicon, aluminium, and other elements at considerably high temperatures. It dissolves quickly in 6-12 N hydrochloric acid and forms thorium chloride. A part of the substance, however, remains undissolved. The investigation of the structure of this residue has shown that it has a cubic structure similar to the structure of oxides and mononitrides. A complete dissolution of the metal is obtained if it is treated with hydrochloric acid containing traces of fluoride or fluosilicate. Thorium forms a great number of hydrates because it has a high charge (4+) and a comparatively small length of the ionic radius (0.99 Å). It also has a strong trend towards the formation of complex compounds with the anions of various salts: nitrates, sulphates, sulphites, carbonates, fluorides, iodates, bromates, chlorides and chlorates, xalates, tartrates, citrates, etc. Moreover, it forms complexes with diketones of the type of acetyl acetone. Numerous complex compounds were extracted by various solvents. The maximum value of the coordination

Card 3/4

Thorium and Its Compounds

SG7/74-28-4-3/6

number of thorium in aqueous solution obviously equals 9. Thorium is of great importance in the production of refractory alloys. It easily forms alloys with aluminum, iron, copper, cobalt, nickel, gold, silver, boron, platinum, molybdenum, tungsten, tantalum, zinc, bismuth, lead, mercury, scandium, beryllium, silicon, and selenium. Thorium does not form amalgam with mercury because its solubility in mercury is very low and amounts to only 0.0154 %. Thorium was used very much in the industry in the years 1880 to 1890 when it was used in the production of incandescent gas lamps. After electricity had been introduced in economy it was scarcely noticed for a considerable amount of time and did not gain its practical importance until 1940, above all in the field of investigations of nuclear energy. In conclusion, this paper gives the synthesis methods of thorium compounds and their characteristics. Table 1 - radioactive series of thorium, table 2 - radioactive properties of the thorium isotopes, table 3 - interaction of thorium with organic acids. There are 3 tables and 311 references, 28 of which are Soviet.

Card 4/4

GOL'BRAYKH

PHASE I BOOK EXPLOITATION SOV/4934

Ryabchikov, Dmitriy Ivanovich, and Yevgeniya Kas'yanovna Gol'braykh

Analiticheskaya khimiya toriya (Analytical Chemistry of Thorium) Moscow,
Izd-vo AN SSSR, 1960. 295 p. Errata slip inserted. 2,300 copies
printed. (Series: Akademiya nauk SSSR. Institut geokhimii i analiticheskoy
khimii. Seriya: Analiticheskaya khimiya elementov)

Sponsoring Agency: Akademiya nauk SSSR. Institut geokhimii i analiticheskoy
khimii im. V. I. Vernadskogo.

Chief Ed.: A. P. Vinogradov, Academician; Editorial Board I. P. Alimarin,
A. K. Babko, A. I. Busev, E. Ye. Vaynshteyn, A. P. Vinogradov, A. N.
Yermakov, V. I. Kuznetsov, P. N. Paley, D. I. Ryabchikov, I. V. Tananayev
and Yu. A. Chemikhov. Eds. of v. "Analiticheskaya khimiya toriya": I. P.
Alimarin and P. N. Paley; Ed. of Publishing House: D. N. Trifonov; Tech.
Ed.: T. P. Polenova.

PURPOSE: This book is intended for analytical chemists in research institutes
and plant laboratories, and for chemistry instructors and students in

Card 1/6

PAGE 1 BACK EXPLANATION 000/000

Approved by Director, Research & Analysis Division
National Intelligence Agency & Defense Science Board, Director of Defense Intelligence

Review granted.

Repd. Drs. A.D. Hirschfeld, Archaeologist, and Dr. R. P. Kuckuk, Director of Chemical

Archaeology, Rep. of Prehistoric Human Pp., Paleop., Geol., Etc., Dept. of Defense

Archaeology.

This collection of articles is intended for chemists, archaeologists and

archeologists.

CONTENTS. The articles describe methods for detection and determination of various ar-

chaeological artifacts.

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chaeological artifacts.

Methodology, Archaeological Studies. Analysis of Blights for Determination

of Archaeological Artifacts. 172

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Geometric Patterns in Archaeological Artifacts. 175

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Geometric Patterns in Archaeological Artifacts. 205

SINYAKOVA, S.I.; GOL'BRAYKH, Ye.K.

Determining small quantities of lead in metallic bismuth. Trudy
Kom. anal. khim. 12:187-190 '60. (MIRA 13:8)
(Bismuth--Analysis) (Lead--Analysis)

KATSMAN, A.; GOL'BRAYKH, Yu.

Brief news. Zdrav.Bel. 7 no.11:79 N '61. (MIRA 15:11)
(WHITE RUSSIA--INDUSTRIAL HYGIENE)
(WHITE RUSSIA--HOSPITALS)

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APPROVED FOR RELEASE: Thursday, September 26, 2002 (LCI) (WFO) 00518R000500L0010-SP
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APPROVED FOR RELEASE: Thursday, September 20, 2018 BY SP5 B1SR00816201489

138 AND THE SONGS

2013 RELEASE UNDER E.O. 14176

Ca

10

Azobenzeno. E. V. Alekseevskii and Z. E. Golbrakht. Russ. 32, 409, Oct. 31, 1933. A mixt. of aniline and activated MnO_2 is exposed to the action of atm. O_3 . The azobenzene is sepd. from the unchanged aniline in the usual manner.

ASM-SEA METALLURGICAL LITERATURE CLASSIFICATION

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卷之三

INVESTIGATION OF THE SORPTIVE AND CATALYTIC PROPERTIES OF ACTIVE MANGANESE DIOXIDE WITH RESPECT TO VAPORS AND GASES
E. V. Akhiezer and Z. B. Godfraind - *J. Russ. Chem. U.S.S.R.*, No. 4, 1954. According to the nature of the adsorbent there can take place adsorptive, chemisorptive, and contact-catalytic processes during sorption in the case of the active MnO₂. The static adsorptive activity of MnO₂ with the vapors of some org. compounds was determined, and the increase of adsorption with the increase of mol. wt. of the homologs was shown. The isotherms of adsorption of CHCl₃ and C₆H₆ were investigated. These were characterized by sharp curves showing the beginning of capillary condensation. The chemisorptive character of the behavior of aniline toward MnO₂, accompanied by the oxidation of aniline to azobenzene, was ascertained. The dynamic activity of granulated MnO₂ to the vapors of aniline was determined, and the chemisorptive character of benzonitrile vapors was shown with respect to active MnO₂, which at the same time effected a hydration of the benzonitrile to benzamide. The adsorption of NH₃ by the active MnO₂ at 0°, 50°, 100°, and 200° was also investigated. V. D. Karpenko

APPENDIX METALLURGICAL OPERATIONS CLASSIFICATION

Part 13: The Arts of War, Chapter 13

The analytical chemistry of organic astro compounds
I. Determination of nitrogen in nitro compounds by
means of alkali fusions. E. V. Alekseevskii and Z. P.
Gol'dfarbkh. *J. Applied Chem. (U. S. S. R.)* 9, 1313-41
(in German 1842) (1936). - Nitro compounds are fused with

KOH or NaOH in an iron tube, and the NH₃ evolved is absorbed in 0.08 N H₂SO₄. For some mono-nitro compds., particularly mononitrophenols, the use of Zn powder or Al is not necessary, but for dinitro or trinitro compds. the results will be low unless one of these is added. The method is not applicable to liquid and easily volatile nitro compds. For *n*-O₂NCH₂OH the reaction is O₂NCH₂OH + 4H₂O = 1.5C + 3.5CO₂ + 3H₂ + CH₄ + NH₃. At a certain temp. interval the reaction of the H formation may predominate over that of CH₄. O₂NCH₂OH + 5H₂O = 1.5C + 4CO₂ + 5H₂ + 0.5CH₄ + NH₃. Addn. of certain C compds. increases the reducing power of alkali because of an increase of the amt. of active C, which, upon reaction with water, produces the necessary excess of H₂. Thus, the addn. of sugar or starch produces an effect almost equal to that of Zn powder, but the addn. of certain org. acids and phenols gives neg. results. Twenty references.

ASB.1.4 METALLURGICAL LITERATURE CLASSIFICATION

The analytical chemistry of nitrogen-containing organic compounds II. New method for the detection of nitrogen. Z. F. Golbrakh. *J. Applied Chem. U.S.S.R.* 10, 1135 (in French) 1947; cf. Aleksyevskii and G., *C.A.* 39, 3587^a - Mix well 10-50 mg. of the sample with 1-0.5 g. of MnO₂, place in a test tube provided with a rubber stopper carrying two glass tubes, one for the admission of air and the other leading to an absorption flask contg. distd. water. Heat for 0.5-1.0 min. Test the water for NO₂⁻ ion by the Griess-Horava reagent. The method is applicable to all classes of org. substances (liquid and solid), morg. NH₃ salts, hydrazine, and complex salts. For the combustion of difficultly combustible albuminous and alkaloid substances, salts contg. no C and complex salts, add some sugar or other C-rich compds. The sensitivity of the method approximates that of the Mulliken and Gabrid method (*C.A.* 6, 304). Seventeen references.
A. A. Poltorov

ASH-50A - RETALIATION LITERATURE CLASSIFICATION

C.A.

PROPERTIES AND PROPERTIES INDEX

2

The properties of copper glycolate. A. A. Grinberg and Z. E. Gol'dstrukh. *J. Gen. Chem. (U.S.S.R.)* 11, 1609-45 (1941).— $(\text{NH}_3\text{CH}_2\text{CO})_2\text{Cu}$ exists as needles (I) and blue platelets (II). Both are monohydrates, but II loses H_2O at 108° whereas I must be heated to 130° and then gradually decomposes. The H_2O solv. of I at 30° is 0.833 g. per 100 g. water, and at 0° 0.402 g. The corresponding solubilities of II are 0.681 and 0.181. When solns. of I or mixts. of I and II are allowed to stand, the soln. falls to that of II. Rise in temp., stirring, and the presence of II hasten this change. No differences between I and II are found in coag. or chem. reactions. The compds. are probably geometrical isomers, and by analogy with the Pt and Pd analogs, the more stable II should be the trans form.

H. M. Leicester

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION SUBJECT		SUBJECT INDEX		SUBJECT INDEX	
GENERAL		GENERAL		GENERAL	
MATERIALS		MATERIALS		MATERIALS	
PROCESSES		PROCESSES		PROCESSES	
TESTS		TESTS		TESTS	

PROPERTIES AND PROBLEMS

M
"The Determination of Quadrivalent Platinum by Visual Titration with
Permanganate. A. A. Grunberg and Z. E. Gol'dfarbkh (Zhur. obshch. khim.,
1956, 14, 178; 808-809). In Russian. It is possible to determine Pt^{IV}
in the form of PtCl₆⁴⁻ ion by titrating with KMnO₄ after reduction with
CuI and oxidation of excess CuI by oxygen from the air. N. V.

APPENDIX - METALLURGICAL LITERATURE CLASSIFICATION

M //
"The Determination of Small Quantities of Palladium in the Presence of Large Quantities of Nickel. Z. E. Godfrakh (Zhur. Org. Khim." 1941, 14, 7-8; 810-811). In Russian. It is shown that dimethylglyoxime can be used for the quantitative determination of very small amounts of Pd (up to 0.05%) in the presence of much greater amounts of Ni. N.A.

Dr. WILHELM, Werner Wenzelius, prof.; Dr. HANKE, Hans von
Hausdorff, prof.; DR. HORN, Walter und Dr. HORN, Walter
von der Tann, Canadien Université, et Dr. KLEIN, Hermann
Bavaria, etc.

Number of numbers materialized in the system and
number of total materialized numbers, $\text{N}_{\text{mat}} = \text{N}_{\text{tot}} - \text{N}_{\text{unmat}}$,
Lakha, Daulatpur, 1966. 400.

GOL'BRAYKH, Z.Ye.

The simultaneous precipitation of copper in the determination of platinum and palladium. Z. E. Gol'braykh (Leningrad Inst. of Tech.). *J. Appl. Chem. U.S.S.R.* 25, 1311-13 (1952) (Engl. translation); *Zhur. Priklad. Khim.* 25, 1249-65.—In the optn. of Pt by HCO_2H , in the presence of Cu^{2+} , the quantity of cptd. Cu is independent of the Cu^{2+} concn. in the soln. This quantity constitutes 27-9% of the Pt wt. in the case of reduction of $[\text{PtCl}_6]^{4-}$ and 20-2% of the Pt wt. with reduction of $[\text{PtCl}_4]^{2-}$. If the Cu^{2+} content of the soln. is decreased considerably below that in the stoichiometric ratio Pt:Cu = 1:1, practically all of the Cu is tied up by the Pt. In the detn. of Pd by reduction of $[\text{PdCl}_6]^{4-}$ in the presence of Cu^{2+} , there is practically no cptn. of Cu by the Pd. The extent of simultaneous pptn. of Cu under conditions of joint pptn. of Pt and Pd depends upon the ratio between pptg. metals. With ratio Pd:Pt = 4:1 the tie-up of Cu does not exceed 1% of the total wt. of metals. In the analysis of sludge which is relatively rich in Pd, the total metals (Pt + Pd) can be detd. with acceptable accuracy by HCO_2H .

Herbert Liebeck

AID P - 2295

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 21/21

Author : Gol'braykh, Z. Ye.

Title : Kudryavtseva, A. A. Sostavleniye khimicheskikh uravneniy (Formulation of Chemical Equations). Moscow, 1953. (Book review)

Periodical: Zhur. prikl. khim., 28, no.3, 338-344, 1955

Abstract : According to the reviewer, methods of formulating equations are well presented and the material for exercises well selected. A good list of principal oxidizing and reducing agents is given, but the theoretical principles are poorly presented.

Institution: None

Submitted : No date

GOL'BRAYKH, Z.Ye.

Certain properties of copper α -alaninate. Zhur.neorg.khim.
1 no.8:1739-1744 Ag '56. (MLRA 9:11)

1. Leningradskiy zaochnyy industrial'nyy institut, Leningrad-
skiy tekhnologicheskiy institut imeni Lensoveta.
(Copper organic compounds) (Alanine)

GOL'BRAYKH, Z.Ye.

[Classes of inorganic compounds] Klassy neorganicheskikh soedinenii; uchebnoe posobie. Leningrad, Leningr. tekhnologicheskii in-t im. Lensoveta, 1961. 43 p. (MIRA 16:6)
(Chemistry, Inorganic) (Chemistry--Classification)

GOL'BRAYKHT, Yuriy Abramovich; AFONINA, G., vedushchiy redaktor; YAKOBYUK, N.
tekhnicheskiy redaktor

[Safety engineering in the coal-tar chemical industry] Tekhnika
bezopasnosti v koksokhimicheskem proizvodstve. Kiev, Gos. izd-vo
tekhn. lit-ry USSR, 1956. 221 p. (MLRA 10:1)
(Coal-tar industry--Safety measures)

GOL'BRAYKHT, Yu.A., inzhener.

Safety appliances for coke oven service space. Bezop.truda v
prom. I no.5:29-30 '57. (MLRA 10:7)
(Coke-ovens--Safety appliances)

SGV/68-59-c-11/32

AUTHOR: Gol'braykht, Yu.A.

TITLE: Blocking of the Path of a Coke Ejector with Changing
Position of the Detachable Door Bar (Blokirovka khoda
koksovytakivatelya s polozeniem dveres"yemnoy shtangi)

PERIODICAL: Koks i khimiya, 1959, Nr 6, p 25-26 (USSR)

ABSTRACT: The danger to workmen involved by the operation of a coke ejector can be avoided by adopting the system suggested by the author, the scheme of which is shown in the figure, p 26. The terminal contact breaker 4KN-2, which enables movement of the coke ejector to its original position, is disconnected from the by-pass button K0 and the terminal contact breaker TB becomes connected in parallel but its contacts short-circuit as the bar goes into the furnace. When the door is removed, the path of the coke ejector through the contacts of the terminal contact breaker 4KN-2 will be possible only when the bar returns to its initial position. Further precautions are mentioned. There is 1 figure.

ASSOCIATION: Zhdanovskiy koksokhimicheskiy zavod (Zhdanov Chemical Coke Works)

Card 1/1

GOL'BRAYKHT, Yuriy Abramovich; AFONINA, G., red.; LAGUTIN, I.,
tekhn. red.

[Safety measures in the coke chemicals industry] Tekhnika
bezopasnosti v koksokhimicheskem proizvodstve. Izd.3., dop.
i ispr. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1960. 310 p.
(MIRA 15:4)

(Coke industry--Safety measures)

GOL'BRAYKHT, Yu.A.

New forms of the work in safety engineering. Koks i khim, no.3:54-56
163. (MIRA 16:3)

1. Zhdanovskiy koksokhimicheskiy zavod.
(Zhdanov--Coke industry--Safety measures)

TOKAREV, A.A.; GOL' BREYKH, A. A.

Hydraulic torque converter for motorbuses. Avt. i trakt. prom. no.9:
7-12 S '56. (MLRA 9:11)

1. Moskovskiy avtozavod imeni I. A. Likhacheva.
(Motorbuses--Transmission devices)

AUTHORS: I. I. Sogolov, A. A. Tokarev, A. A. V-117-58-10-7/16

TITLE: The Influence of Viscosity of the Selection of the Working Fluid of Hydraulic Transmissions (Vliyanie vysokosti na vybrat' rastvoriny chislennosti stirospereinani)

PUBLISHER: Izd-vo Nauk. i Tekhn. Litteratury, MGA, Nr. 1, 1984, 24 p. 24-25 cm

ABSTRACT: The Moscow Automobile Plant imeni Likhachev is working on the development of a hydraulic transmission for the town bus "M-129". One of the design peculiarities is that the oil serves as a lubricant besides serving as a working fluid in the torque converter. The design requires a special oil with low viscosity and a maximum specific weight. A suitable design of the torque converter may change the requirements for the working fluid. Detailed investigations were conducted to select a working fluid for the torque converter "E129". This working fluid considerably improved the work characteristic of the torque converter. Figure 1 shows the characteristics of the "E129" torque converter. The research was divided into test stand operations and actual road tests. The latter were performed over a distance of 25,000 km with a total 90 hr with a load corresponding to 75 passengers. For these tests oils of types "ITM" and "ITM-2" were used.

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U7-117-16-10-7/16
The Influence of Viscosity of the Selection of the Working Fluid of Hy-
draulic Transmissions

No excessive wear was detected. The characteristics of the fluid "IPM" and "IPM-1" are shown graphically. It was established that a three-stage torque converter is sensitive to the viscosity of the working fluid. Its sensitivity increases with decreasing viscosity. For the future, synthetic working fluids which possess the required properties of a working fluid and are lubricants at the same time may be quite important. There are 6 graphs.

ASSOCIATION: Moskovskiy avtomobilniy zavod imeni Likhacheva 'Moscow Automobile Plant imeni Likhachev'

1. Fluids...Viscosity - 2. Hydraulic systems...Effectiveness
2. Automatic transmission...shift patterns - 3. Oil...Fluid properties

Card 2/2

CONFIDENTIAL

Performance of an automobile hydraulic transmission system
1960's - 1970's
(Automobile--transmission device)

GOL'CHIK, Yu.

Systematic position of European bitterling (*Rhodeus sericeus amarus* Bloch., 1783). Vop. ikht. no.13:39-50 '59. (MIRA 13:3)

1.Kafedra sistematiceskoy zoologii Karlova universiteta v Prague,
kafedra zoologii Bratislavskogo universiteta im. Komenskogo.
(Bitterling)

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R000515610014-8

GOLCHEN, . . I., RELATION, A. S.

"Achievements of Magnitogorsk Metallurgical Combine during the First Five-Year Plan of Soviet Metallurgy,"

Achievements of Blast Furnace Operators of the Magnitogorsk Metallurgical Combine, Moscow, Metallurgizdat, 1957, 279 pp.

GOLCHIN, V.I.

Work of efficiency promoters and inventors at the Magnitogorsk
combine. Stal' 17 no.1:93..94 Ja '57. (MLRA 10:3)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Magnitogorsk Metallurgical plants)

SC7/175-58-6-31/41

AUTHOR: Golchin, Yu.

TITLE: Ejection

PERIODICAL: Tankist, 1958, Nr 6, pp 48-50 (USSR)

ABSTRACT: The author draws attention to a device mounted on the tank barrel. It is not a muzzle brake, nor a flame extinguisher but an ejection device. The principle of this device is based upon the utilization of the kinetic energy of a fluid medium for the purpose of pressing out another fluid medium. It may be gas, a liquid, vapors, etc. The principle of the ejector is shown in a sectional drawing (Figure 1). The high-pressure gas enters the sphere of a low pressure gas. The velocity of the first increases, pressure drops and rarefaction follows. This causes suction of the low-pressure gas into the flush chamber. The stream of the high pressure gas seizes the low pressure gas and enters a diffuser. The velocity of the gas mixture decreases,

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AV/1 5-58-6-31/41

Ejection

the pressure rises and causes the final exhaustion. The ejection principle is widely applied in the cooling of engines. The ejection system is utilized in cooling the type DMT-250 Diesel electric tractor ("Tankiit" Nr 8, 1957). Ejecting mufflers are installed on small tonnage vessels provided with Diesel engines. (V.A. Beloborodov, "Contemporary Diesels on Small Tonnage Vessels" 1941). A sectional drawing shows the flow of the gases (Figure 2). Powder gases saturated with carbon monoxide, entering the fighting compartment of the tank are harmful to the human organism. For blowing through the gun bore, the ejection device is employed. On the barrel of the gun, near the muzzle, a special jacket is mounted. A sectional drawing shows the arrangement (Figure 3). In the barrel walls, several holes are bored at an angle of $30 - 30^{\circ}$ with the bore axis. These holes are provided with nozzles. On firing,

Card 2/3

SCV/175-58-6-31/41

Ejection

prior to the projectile leaving the gun, the powder gases enter the jacket. The pressure in the jacket attains 20 to 30 atmospheres. After the shell has left the gun bore, the gases escape from the jacket towards the muzzle with great velocity, creating behind them a sphere of low pressure. The gases remaining in the bore and in the cartridge case follow the gases flowing from the jacket and escape through the muzzle. This arrangement reduces the concentration of carbon monoxide in the fighting compartment of the tank by 8 to 10 times. This means the creation of normal working conditions for the tank crew. There are 3 sectional diagrams.

Card 3/3

GOLCOV, Valentin

Moscow Central Airport. Letecky obzor 7 no.12:360-362 D'63.

(SECRET) (CIA)
POLAND / Chemical Technology. Processing of Solid Fuels

H-11

Abstr Jour : RZhKhim., No 12, 1958, No 46931

Author : Gol'ch

Inst : Not given

Title : Preparation of Synthetic gas according to the Coppers-Totzek Method.

Orig Pub : Gaz. wied. techn. sanit., 1956, 30, No 5, 227-229.

Abstract : A brief description is given for the methods of preparing synthetic gas from the degassing of a dust-like solid fuel. A description is given of the Coppers-Totzek Method, which is based on the degasification of coal dust with oxygen. Data is supplied on the plants which are manufacturing synthetic gas by this method.

Card 1/1

POLAND / Chemical Technology. Chemical Products and H-23
Their Application. Chemical Processing of
Natural Gases and Petroleum. Motor and
Rocket Fuels. Lubricants.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2557.

Author : Golez, J.

Inst : Not given.

Title : The Manufacture of City Gas From Hydrocarbons and
Also From Liquefied Gases.

Orig Pub: Gaz, woda i techn. sanit., 1958, 32, № 2, 65-68.

Abstract: The review of the modern methods which are based
on thermal and thermo-catalytic conversion of hy-
drocarbon gases, and a conclusion concerning their
applicability in the development of Polish gas in-
dustry which is based on natural and petroleum gas-
es and on those obtained as waste products from
chemical industry. Nine references are given.

Card 1/1

GOLCZ, Janina

Work of the Central Laboratory of the Gas Industry on the purification of gas carried on during the last ten years. Koks 7 no.2: 59-63 Mr-Ap '62.

1. Centralne Laboratorium Gazownictwa, Warszawa.

CZABAJSKI, T.; GOLCZ, L.

Result of cultivation of castor bean during 1951-53. Acta Poloniae
pharm. 11 Suppl.:91-94 1955.

I. Państwowy Instytut Naukowy Leczniczych Surowcow Roslinnych,
Poznan.

(CASTOR BEANS,
prod. in Poland)

GOLCZ, Leszek, dr inz.; KOWALEWSKI, Zdzislaw

Content of glycosides of Erysium perofskianum Fisch. et Mey. seeds
in various stages of maturity. Inst przem ziel Biul 8 no.1/2:35-
38 Mr-Je '62.

1. Zaklad Agrotechniki Roslin Leczniczych, Instytut Przemyslu
Zielarskiego, Poznan. Kierownik Zakladu: dr inz. L.Golcz.

GOLCZ, L., dr inz.; JARUZELSKI, M.

A visit in Bulgaria. Inst przem ziel Biul 8 no.1/2;72-74 Mrw-Je
'62.

CZABAJSKI, Tadeusz; GOLCZ, Leszek, dr inz.

Influence of mineral fertilizing upon the yield of morphine in
Papaver somniferum L. Inat przem ziel Biul 8 no.3:134-140 S '62.

1. Zaklad Agrotechniki Roslin Leczniczych, Instytut Przemyslu
Zierlarskiego, Poznan. Kierownik: dr. in. L.Golez.

GOLCZ, L., dr inż.

International Symposium in Leipzig on Breeding and Cultivating
Medicinal Plants. Inst przem ziel Biul 8 no.4:207-210 D '62.

2

GOLCZ, Leszek, dr inż.; HOFFMANN, Marian, doc. dr; ZALECKI, Ryszard

Effect of chemical fertilizing and increased doses of nitrogen on the crop and Helveticoside content in the seeds of *Erysimum Perowskianum* grown on soil of different moisture. Inst przem ziel Biol 8 no.4:16-180 D 1961.

1. Katedra Uprawy i Nawożenia koli Wyższej Szkoły Rolniczej, Poznań,
Kierownik: doc. dr M. Hoffmann, i Zakład Agrochemiki Roslin
Leczniczych TFZ Instytut Przemysłu Zielańskiego, Poznań, Kierownik: dr
ins. L. Golesz.

Country : POLAND

E

Category: Analytical Chemistry. General

Abs Jour: RZhKhim., No 17, 1959, No 60430

Author : Golczewski, J.

Title : -

Title : Chemiluminescent Indicators For Neutralization Reactions

Orig Pub: Chemic, 1953, 11, No 12, 402

Abstract: Described is the application of 2, 4, 5-triphenylimidazol (luphin) (I) as chemiluminescent acid-base indicator. For every 100 ml of the titrated solution, 5 ml of a 3% H_2O_2 solution, 1 ml of a 5% $K_3Fe(CN)_6$ solution, 1 ml of 0.45% ethanol solution of I, 30 ml of 96% ethanol are added in the dark and titrated with

Card : 1/2

E-1

Country : POLAND
Category: Analytical Chemistry. General.

E

Abs Jour: RZhKhim., No 17. 1959, No 60430

NaOH solution. At the titration end point (pH of 8.9-9.4) the whole solution becomes luminescent that lasts > 1 minute. Accuracy of the titration with I corresponds to that attained in titrations with phenolphthalein. I is particularly useful in the titration of colored solutions. -- A. Nemcruk

Card : 2/2

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Golczewski, S.: STANDARDIZATION OF THE QUALITY OF POLYACRYLIC ACID. *Hutnik*, 10, 17-30, 1938. New standards are suggested which omit density and composition but introduce linear thermal expansion, volume expansion at high temperatures, and resistance to temperature change.

CX

Choice of the coke-oven type. Stanislaw Golczewski.
Hutnik 18, 481-4(1951).—G gives a short characteristic of various coke ovens. The following items are discussed: type of charge, width, length, and height of coking chambers, efficiency of the oven, and type of fuel. Vertical and horizontal cross sections of the ovens, the convergence of sidewalls, refractory materials used in construction of the oven and heat regenerators, and methods of collection of gaseous products are described. Adam J. Piskor

GOL C2 EWI STK, S.

P O L .

3104

Golezowski S. Classification of Coke Ovens.
"Klasifikacjia pleców koksowniczych". Wydruk. Nr. 3, 1983. p.
165-170, 5 figs., 4 tabs.
Definition of a coke oven. Fundamental classification of coke ovens:
1) directly heated ovens differentiated as to open ovens and closed
ovens; 2) indirectly heated (by product) ovens, differentiated as to
muffle ovens and chamber ovens. Chamber ovens are subdivided into
vertical chamber and horizontal chamber ovens with a further division

DIV 2

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tion between ovens with horizontal heating flues and ovens with vertical heating flues. Next, the author characterizes and classifies exclusively horizontal chamber ovens with vertical flues and distinguishes: 1) ground based ovens and floor ovens — differentiated according to the type of the oven bed; 2) waste heat, recuperative and regenerative ovens — differentiated according to the method of utilizing waste heat; 3) ovens of down draft, up draft and reversible flow direction — differentiated according to the direction of combustion in heating walls; 4) ovens with the total wall surface heated, ovens with half wall surface heated and ovens with centre heated walls — differentiated according to the system of heating the coking chambers; and 5) ovens of vertical and half-right system of flues. Types of regenerators; double-divided ovens and individual regenerators. Methods of oven firing by means of one kind of fuel gas — simple fuel oven, by means of two kinds of fuel gas — dual fuel oven. Detailed classification table of horizontal coking chamber ovens with vertical heating flues including trade names and description of outstanding features of design and construction of elements.

C. Z. B. W. S. K., 5

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Spec

✓ Specifications for coke oven refractories. S. Cullinan et al.
Hutnik, 22 [1] 393-401 (1955), abstracted in J. Inst. Refract. Instr. (London), 195 [2] 271 (1957).—The suitability of constructional materials (cements, lime, brick, and refractories) for different parts of coke ovens is discussed in the light of Polish specifications.

GOLCZYK, Alina

Common bile duct calculus in 6 week old infant. Polski tygod. lek.
14 no. 12:528-529 23 Mar 59.

1. Z II Kliniki Chorob Dziecięcych A. M. w Warszawie; kierownik: prof.
dr med. M. Michalowicz. Adres: Warszawa, II Klin. Chorob. Dzieci A.M.
(CHOLELITHIASIS, in inf. & child
common bile duct in newborn, case report (Pol))
(INFANT, NEWBORN, dis.
common bile duct calculus, case report (Pol))

GOLCZYK, Alina

A case of male pseudohermaphroditism in a 6-month-old infant.
Polski tygod.lek.15 no.21:801-803 23 My '60.

I. Z II Kliniki Chorob Dziecięcych A.M. w Warszawie; kierownik:
prof. dr med. M.Michalowicz)
(HERMAPHRODITISM case reports)